EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Lafata (Reg. No. 37,166), the undersigned, on Sept 09, 2008 and Sept 10, 2008.

3. The application has been amended as follows:

IN THE CLAIMS:

The claims of the invention have been amended as follows:

1. (Currently Amended) A method of discovering and operating a payload node, comprising:

~~in a computer network having a central node coupled to a payload node slot,~~ coupling the payload node to ~~the~~ **a** payload node slot **in a computer network having a central node coupled to the payload node slot**;

~~the payload node~~ executing **by the payload node** a payload boot algorithm located at the payload node;

~~the payload boot algorithm~~ discovering **by the payload boot algorithm** a hardware capability set of the payload node;

communicating the hardware capability set to a payload discovery manager at the central node;

~~the payload discovery manager~~ selecting **by the payload discovery manager** a software set based on the hardware capability set;

~~the payload discovery manager~~ communicating **by the payload discovery manager** the software set to the payload node; and

~~the payload node~~ transitioning **operating the payload node** from the payload boot algorithm to the software set while bypassing rebooting the payload node to the software set.

2. (Original) The method of claim 1, wherein the software set comprises a transition module and an operating system module, wherein transitioning comprises the transition module transitioning the payload node from the payload boot algorithm to the operating system module.

3. (Currently Amended) The method of claim 2, wherein **transitioning, by** the transition module**,** ~~transitions~~ the payload node from the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

4. (Currently Amended) The method of claim 2, wherein **selecting, by** the payload discovery manager, ~~selects~~ the transition module based on the hardware capability set and the software set selected.

5. (Currently Amended) The method of claim 2, wherein **selecting, by** the payload discovery manager, ~~selecting~~ the transition module to transition the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

6. (Original) The method of claim 1, wherein selecting comprises selecting the software set to optimize the computer network.

7. (Original) The method of claim 1, wherein the computer network is a backplane-based computer network.

8. (Currently Amended) The method of claim 1, further comprising:

removing the payload node from the payload node slot;

changing the hardware capability set to a second hardware capability set;

coupling the payload node to the payload node slot;

discovering by the payload boot algorithm ~~discovering~~ the second hardware capability set;

communicating the second hardware capability set to the payload discovery manager;

selecting by the payload discovery manager ~~selecting~~ a second software set based on the second hardware capability set and communicating the second software set to the payload node; and

transitioning operating the payload node ~~transitioning~~ from the payload boot algorithm to the second software set bypassing rebooting the payload node to the second software set.

9. (Currently Amended) In a payload node, a method, comprising:

~~upon coupling the payload node to a payload node slot in a computer network having a central node, the payload node~~ executing **by the payload node** a payload boot algorithm located at the payload node **upon coupling the payload node to a payload node slot in a computer network having a central node**;

~~the payload boot algorithm~~ discovering **by the payload boot algorithm** a hardware capability set of the payload node;

communicating the hardware capability set to a payload discovery manager at the central node; and

~~upon the payload discovery manager selecting a software set based on the hardware capability set and communicating the software set to the payload node,~~ **transitioning operating** the payload node ~~transitioning~~ from the payload boot algorithm to ~~the~~ **a** software set while bypassing rebooting the payload node to the software set

upon the payload discovery manager selecting the software set based on the hardware capability set and communicating the software set to the payload node.

10. (Original) The payload node of claim 9, wherein the software set comprises a transition module and an operating system module, wherein transitioning comprises the transition module transitioning the payload node from the payload boot algorithm to the operating system module.

11. (Currently Amended) The payload node of claim 10, wherein **transitioning, by** the transition module**,** ~~transitions~~ the payload node from the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

12. (Original) A computer network, comprising:

a central node;

a payload discovery manager located at the central node, wherein the payload discovery manager is coupled to select a software set;

a payload node slot coupled to the central node;

a payload node coupled to interface with the payload node slot, wherein the payload node comprises a hardware capability set; and

a payload boot algorithm located at the payload node and coupled to execute when the payload node is coupled to the payload node slot, wherein the payload boot

algorithm discovers the hardware capability set and communicates the hardware capability set to the payload discovery manager, wherein the payload discovery manager selects the software set based on the hardware capability set and communicates the software set to the payload node, and wherein the payload node transitions from using the payload boot algorithm to using the software set while bypassing rebooting to the payload node to the software set.

13. (Original) The computer network of claim 12, wherein the software set comprises a transition module and an operating system module, and wherein the transition module transitions the payload node from the payload boot algorithm to the operating system module.

14. (Original) The computer network of claim 13, wherein the transition module transitions the payload node from the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

15. (Original) The computer network of claim 13, wherein the payload discovery manager selects the transition module based on the hardware capability set and the software set selected.

16. (Original) The computer network of claim 13, wherein the payload discovery manager selects the transition module to transition the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

17. (Original) The computer network of claim 12, wherein the payload discovery manager selects the software set to optimize the computer network.

18. (Original) The computer network of claim 12, wherein the computer network is a backplane-based computer network.

19. (Currently Amended) A computer-readable medium containing computer instructions for instructing a processor to perform a method of discovering and operating a payload node, the instructions comprising:

~~in a computer network having a central node coupled to a payload node slot, upon coupling the payload node to the payload node slot~~ **instructions for** the payload node executing a payload boot algorithm located at the payload node **upon coupling the payload node to a payload node slot in a computer network having a central node coupled to the payload node slot**;

instructions for the payload boot algorithm discovering a hardware capability set of the payload

node;

instructions for communicating the hardware capability set to a payload discovery manager at the central node;

instructions for the payload discovery manager selecting a software set based on the hardware capability set;

instructions for the payload discovery manager communicating the software set to the payload node; and

instructions for the payload node transitioning operating from the payload boot algorithm to the software set while bypassing rebooting the payload node to the software set.

20. (Original) The computer-readable medium of claim 19, wherein the software set comprises a transition module and an operating system module, wherein transitioning comprises the transition module transitioning the payload node from the payload boot algorithm to the operating system module.

21. (Original) The computer-readable medium of claim 20, wherein the transition module transitions the payload node from the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

22. (Original) The computer-readable medium of claim 20, wherein the payload discovery manager selects the transition module based on the hardware capability set and the software set selected.

23. (Original) The computer-readable medium of claim 20, wherein the payload discovery manager selecting the transition module to transition the payload boot algorithm to the operating system module while bypassing rebooting the payload node to the operating system module.

24. (Original) The computer-readable medium of claim 19, wherein selecting comprises 20 selecting the software set to optimize the computer network.

25. (Original) The computer-readable medium of claim 19, wherein the computer network is a backplane-based computer network.

ALLOWABLE SUBJECT MATTER

4. Claims 1-25 are allowable over the prior art of record.

5. The following is an examiner's statements of reason for allowance: The examiner has found that the prior art of record does not appear to teach or suggest or render obvious the claimed limitations in combination with the specific added limitations as recited in independent claims and subsequent dependent claims. The prior art of record

fails to teach or suggest a method and system of discovering and operating a payload node including coupling the payload node to a payload node slot in a computer network having a central node coupled to the payload node slot, executing by the payload node a payload boot algorithm located at the payload node, discovering by the payload boot algorithm a hardware capability set of the payload node, communicating the hardware capability set to a payload discovery manager at the central node, selecting by the payload discovery manager a software set based on the hardware capability set, communicating by the payload discovery manager the software set to the payload node, and transitioning operating the payload node from the payload boot algorithm to the software set while bypassing rebooting the payload node to the software set. This ensures a faster and more efficient transfer from payload boot algorithm to operating system module with minimal interruption so the payload node is operational on the computer network quickly without having to reboot from a BIOS or firmware.

6. Examiner interprets the limitation "computer-readable medium" as a device that stores computer instructions and participates in providing the computer instructions to a computer processor for execution. The computer-readable medium includes non-volatile media, volatile media, computer storage devices and memories. For example, optical or magnetic disks, ROMs, PROMs, EPROMs, EEPROMs, RAM, hard disks, CDs, DVDs. The “computer-readable medium” does not include acoustic or electromagnetic waves, such as those generated during radio-wave, infra-red, and optical data communications.

ADDITIONAL REFERENCES

7. The examiner as of general interest cites the following references:

A) Trossen, U.S. Pat. Application Pub. No. US 2004/0003058 A1.

B) Wookey, U.S. Pat. Application Pub. No. US 2002/0147974 A1.

C) Harris, U.S. Pat. Application Pub. No. US 2003/0212772 A1.

D) Bondi, U.S. Pat. No. 5,710,885.

E) Hemphill et al, U.S. Pat. No. 6,490,617.

F) O'Hara, Jr. et al, U.S. Pat. No. 7,340,247.

G) de Azevedo et al, U.S. Pat. No. 6,977,908.

H) Anderson et al, U.S. Pat. No. 7,415,634.

I) McKay et al, U.S. Pat. No. 6,318,247.

J) Wolfe et al, U.S. Pat. No. 7,155,547.

K) Montpetit et al, U.S. Pat. Application Pub. No. US 2007/0223523 A1.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip B. Tran whose telephone number is (571) 272-3991. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip B Tran/
Primary Examiner, Art Unit 2155
Sept 14, 2008